CLAIMS

What is claimed is:

1. A method for publication and discovery of e-services in a system having a client organization, a discovery agent, a client agent, and one or more service provider organizations that provide e-services, the method comprising the steps of:

a) the service provider organizations publishing at least one e-service description in a predetermined format;

b) the client organization employing a discovery agent to find prospective e-services based on one or more search parameters;

c) the discovery agent providing prospective services that satisfy the search parameters; and

d) the client organization utilizing the client agent to programmatically connect to one or more prospective services by employing a protocol that is compatible with the service provider organizations.

2. The method of claim 1 wherein the e-services are published in a predetermined location.

3. The method of claim 2 wherein the predetermined location is the website of the service provider organization.

4. The method of claim 1 wherein the search parameters includes a description of the service by one of keywords, category, logical forms and expressions.

5. The method of claim 1 wherein the protocol includes a communication protocol and an invocation protocol.

6. The method of claim 1 wherein the protocol includes one of HyperText Transfer Protocol (HTTP), File Transfer Protocol (FTP), and Microsoft Message Queue Server (MSMQ).

7. The method of claim 1 wherein the predetermined format includes an e-service data sheet.

8. The method of claim 1 wherein the e-service description is a mark-up language document.

9. The method of claim 1 wherein the e-service description is an XML document.

10. The method of claim 7 wherein the e-service description includes one of a service description, input schema name, output schema name, and protocols-supported field.

11. A system for comprising:

a) a client organization that provides at least one search parameter for an electronic service;

b) at least one service provider organization for publishing an e-service description in a predetermined format; and

c) a discovery agent for use by the client organization; wherein the discovery agent receives the search parameter and provides at least one e-service that matches the search parameter.

12. The system of claim 11 wherein the discovery agent and the client agent are disposed in the client organization.

13. The system of claim 11 wherein the discovery agent and the client agent are disposed in one of the service provider organizations.

14. The system of claim 11 wherein the discovery agent and the client agent are disposed in a location that is remote from the client organization.

15. The system of claim 11 wherein the discovery agent includes

a match unit for receiving one or more search parameters and one or more e-service descriptions, and based thereon for generating a first list of prospective services that meet the search parameters;

a semantic search unit for receiving one or more search parameters and one or more e-service descriptions, and based thereon for generating a second list of prospective services that meet the search parameters; and

a search result generator coupled to the match unit and semantic search unit for receiving the first list of prospective services and the second list of prospective services and based thereon for generating a final list of prospective services.

16. The system of claim 15 wherein the match unit includes one of clean logic, fuzzy logic, and a combination thereof.

17. The system of claim 15 wherein the search parameters includes a description of the service by one of keywords, category, logical forms and expressions.

18. The system of claim 11 wherein the e-service description is a mark-up language document.

19. The system of claim 18 wherein the e-service description is an XML document.

20. The system of claim 11 wherein the e-service description includes one of a service description, input schema name, output schema name, and protocols-supported field.